

The Impact of Communication Apprehension and Fear of Talking with a Physician on Perceived Medical Outcomes

Virginia P. Richmond
West Virginia University

Ralph S. Smith, Jr.
Charleston Psychiatric Group
Charleston, West Virginia

Alan M. Heisel
West Virginia University

James C. McCroskey
West Virginia University

This study examined the relationships among trait CA, state CA (fear of interacting with a physician), and patient perceived satisfaction with quality of medical care and physician. The results indicated that trait CA and fear of the physician were positively related. However, trait CA was not significantly related to patient perceived satisfaction with quality of medical care or physician. State CA, in contrast, was significantly negatively related to both patient perceived satisfaction with medical care and satisfaction with physician. It is concluded that future research should investigate the impact of physicians' engaging in positive communication behaviors on patients' apprehension and medical outcomes.

Communication apprehension (CA) is "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1977, 1978, 1997, 1998). For more than two decades this definition of CA has been used to describe the trait of an individual who has a fear or anxiety about

Virginia P. Richmond (Ph.D., University of Nebraska-Lincoln, 1977) is Professor and Coordinator of Extended Learning Graduate Programs in Communication Studies, West Virginia University, Morgantown, WV 26506-6293. **Ralph S. Smith, Jr.** (M. D., Ph. D., Northwestern University) is a practicing psychiatrist at the Charleston Psychiatric Group in Charleston, WV. **Alan M. Heisel** (MA, Cleveland State University, 1997) is a doctoral student in Communication Studies and Curriculum and Instruction and **James C. McCroskey** (Ed. D., Pennsylvania State University, 1966) is a Professor in the Department of Communication Studies at West Virginia University, Morgantown, WV 26506-6293.

real or expected communication. It is clear from more than twenty years of research that the fear or anxiety and internal individual discomfort associated with trait CA can impact individuals across a variety of communication situations. The lower the trait CA, the less the internal discomfort. The higher the trait CA, the more the internal discomfort (Ayres & Hopf, 1993; McCroskey, 1978, 1997, 1998; McCroskey & Beatty, 1998; McCroskey & Richmond, 1982; McCroskey & Richmond, 1998; Richmond, 1984, 1997; Richmond & McCroskey, 1998).

It is clear that there are some externally observable behaviors that are likely to occur as a function of high CA. High CAs, when presented with a mandate to communicate, will confront the fight or flight syndrome. Some will stay and talk even though it makes them highly uncomfortable. For a small proportion of these "fighters," even over-communication is possible. However, most CAs take the choice of flight, they avoid or withdraw from the communication. Avoidance and withdrawal are the most common behavioral responses to high CA.

When avoidance and withdrawal are not possible, and the high CA is forced to talk, communication disruption commonly occurs. These persons may have disfluencies in verbal speech, stutter-starts and interruptions in speech, and unusual nonverbal behaviors. These persons may use a variety of vocal segregates (such as "ahhh," "hum," "ya know") and/or unfilled pauses as a result of their anxiety. Because of the behavioral impacts of CA on a person's communication (or lack of communication), others may have very negative perceptions of these people.

Since more talk is viewed more positively than less talk in the United States culture, high CA can lead to negative perceptions (Daly & Bippus, 1998; Hayes & Metzger, 1972; Richmond, 1997; Richmond, & McCroskey, 1998). High CA persons have a lower willingness to communicate (WTC), higher levels of shyness, lower predispositions toward verbal behavior (PVB), and lower self-perceived communication competence (SPCC). High CAs are often viewed by others in the United States culture as less willing to communicate and shy, and distinctly less competent, outgoing, friendly, socially attractive, assertive, responsive, intelligent, and likely to be a leader (Daly & Bippus, 1998; Hayes & Metzger, 1972; Richmond, 1997; Richmond, & McCroskey, 1998). Those persons with high CA consistently are viewed more negatively than those with low CA in the U.S. culture. Presumably, these general findings from several decades of research also would apply to physicians' perceptions of their apprehensive patients.

Communication in Health Care Settings

In recent years an increase in research directed toward communication in health care settings has been observed. Adler (1977), Buller and Buller (1987), DiMatteo (1979), Kreps (1989), Thompson (1984, 1994) and other communication specialists have called for more research focused on communication in health care settings. Concurrently, the medical field has conducted more investigations into the relationship between human communication and perceptions of health care outcomes (Anderson et al., 1987, 1993; Epstein et al., 1993, 1994; Levinson, 1994, 1995; and Lewis, 1994). Over the past 20 years some conclusions can be made about communication in the health care setting from the medical perspective and human communication perspective.

The Health Care Perspective. Descriptions of good physician-patient relationships often

have centered on good interpersonal communication behaviors. The conclusions examined below from various health related articles review human communication concepts with good patient-physician relationship. Thompson (1986) reviews interpersonal communication skills needed by health care providers. The skills are as follows: Obtaining information, giving information, and enhancing rapport. Roter, Hall, & Katz (1988) surmised that doctors' information giving, seeking, partnership building, social conversation, and positive talk were positively related to a good doctor-patient relationship. Rowland-Morin and Carroll (1990) suggest that physicians who have similarity in word usage, appropriate reaction time latency (pause to listen, then respond), seem more involved in patient issues, use patient-centered interview skills, are expressive, and not overly communicatively dominant substantially contribute to a good physician-patient relationship. Smith and Thompson (1993) state, "As physicians, we must continually remind ourselves, our colleagues, and our students of the inherent and powerful therapeutic value of a good doctor-patient relationship despite increasing technological, financial, and legal forces that often pushes us in other directions" (p. 169). Smith and Thompson suggest that doctors who listen, offer advice, and are adaptive, active, outgoing, and impart friendliness and confidence will have patients who have lower recidivism, litigation, cost of care, and more beneficial behavioral changes, greater compliance, greater respect for overall care and esteem for physician, and high likelihood of returning to visit the physician. Keller and Carroll (1994) suggest four communication relationship tasks must be performed during the medical encounter in order for effective physician-patient communication to occur. These four communication relationship tasks are to engage, empathize, educate, and enlist the patient in the doctor-patient relationship. Epstein and Beckman (1994) outline communication skills for the practicing physician which can improve doctor-patient relationship. These communication skills needed by doctors are as follows: active listening, eliciting patients' perspective on illness, decoding and responding to patient emotions, and negotiating treatment plans more effectively. In conclusion, it is clear that much of the medical field recognizes that communication must clearly be considered as a significant part of the good doctor-patient relationship.

These descriptions of good physician/patient interactions are consistent with contemporary theories of effective interpersonal communication. However, the focus in much of this writing is on the behavior of the doctor. The potential impact on these relationships of high patient fear or anxiety about talking with a physician is seldom acknowledged in these writings.

The Human Communication Perspective. Thompson (1994), in her review on interpersonal communication and health care, indicates that the following elements impact the development of good doctor-patient relationships: content of communication, obtaining and giving information, time allocated to patient care, rapport building with patient, listening skills, communication training, nonverbal communication, language usage, controlling interaction, disconfirmation communication, and openness. Clearly, many of these elements could be impacted by patient apprehension about communicating with the physician.

Wheless (1984) specifically looked at apprehension, trust, and willingness to discuss gynecological issues with a physician. She used a modified version (12 items) of the Personal Report of Communication Apprehension (PRCA) to measure apprehension in the gynecological setting. Wheless found that as communication apprehension about

communication with a gynecologist increased, the willingness to discuss gynecological topics decreased. She concluded that "individuals who are apprehensive about communicating with a particular person, do not normally initiate interactions with that person" (p. 120).

Ayres, Colby-Rotell, Wadleigh, and Hopf (1996) developed a five-item patient's report of communication apprehension (PRCAP) instrument. The PRCAP was determined to have a positive correlation with the PRCA, a moderate negative correlation with willingness to communicate (WTC), and a moderate negative correlation with self-perceived communication competence (SPCC). Additionally, persons who scored highly on the PRCAP reported less satisfaction with interactions in the physician-patient relationship. Persons who scored themselves as low PRCAPs reported more satisfaction with interactions with physicians. Booth-Butterfield, Chory, and Beynon (1997) studied trait and state CA in relation to question asking and information seeking. The study revealed that trait CA had a small relationship with patient question asking and information seeking. State CA (as defined by Booth-Butterfield et al., 1997) had a strong relationship with patient question asking and information seeking. The higher the state CA, the lower the patient question asking and information seeking; the lower the state CA, the higher the patient question asking and information seeking. Booth-Butterfield et al., (1997) concluded that "people who experience either higher trait CA or specific health state CA will probably communicate less effectively with their health care providers about their health problems. This failure to communicate can then quite easily lead to increases in morbidity and mortality" (p. 246). In conclusion, the modest amount of research conducted with regard to patients' fear or anxiety related to communicating with their physician is consistent with the theory that patient apprehension can seriously interfere with the physician/patient communicative relationship and be associated with negative outcomes for the patient.

Satisfaction with Medical Care and Physician. In the health care environment, high CAs are likely to be patients who ask fewer questions, initiate less conversation, and avoid communicating with their physician whenever possible. Since high CAs in other contexts are more likely to have a fear of real or anticipated communication and manifest avoidance or withdrawal behaviors, high CAs in the health care setting should have more state anxiety when communicating with persons of higher status, such as their primary care physicians. Based on the results of the Ayres et al., Wheelless, and Booth-Butterfield et al., studies it is clear that trait and state communication may have a serious, perhaps even debilitating effect on effective physician-patient communication. Therefore, it is important to study how trait CA relates to state anxiety (or fear of physician, FOP), patient-perceived quality of medical care, and patient satisfaction with the physician. Additionally, the relationship between patient fear of communicating with the physician (FOP) and patient perceptions of quality of medical care and satisfaction with the physician should be examined. Therefore, the following five research questions were posed:

- RQ1 What is the relationship between trait CA and state CA (FOP) in the health care setting?
- RQ2 What is the relationship between trait CA and patient perceived quality of medical care?
- RQ3 What is the relationship between trait CA and patient satisfaction with the physician?

- RQ4 What is the relationship between state CA (FOP) and patient perceived quality of medical care?
- RQ5 What is the relationship between state CA (FOP) and patient satisfaction with the physician?

METHODS

Participants

Participants were 333 adult patients from various physicians offices in a mid- Atlantic state. The sample consisted of 176 females and 157 males. The mean age of the 333 adult patients was 33.14. Participation was voluntary. Participants were anonymous respondents. All participation took place in the physicians' offices, following a visit to the physician. Upon leaving the physicians' offices, patients were handed a survey to complete about their primary care physician. If the patient elected to complete the questionnaire, he or she could, then leave the questionnaire in a box near the exit. If the patient elected not to complete the questionnaire, he or she could simply leave the uncompleted questionnaire in the box near the exit. Patients were not assisted in the completion of the questionnaire. The patients were simply asked by the exit staff "if you have the time, would you please complete this questionnaire about physician/patient communication." Then the questionnaire was handed to the exiting patient. The data were collected over a two-month time period. This procedure for data collection is very similar to methods employed by Health Maintenance Organizations in the area. Therefore, the study appeared to the participants to be normal procedure.

Instruments

Apprehension Measures. On the questionnaire, patients were asked to complete two measures concerning patient apprehension. The first apprehension measure was the Personal Report of Communication Apprehension 24 (PRCA24; McCroskey, 1993). Obtained reliability for the PRCA 24 was .95 in this study.

The second apprehension measure was directed toward "communicating with my physician." It was a five-item modified version of the Spielberger (1966) state anxiety measure, referred to here as the FOP (Fear of Physician) measure. The following items were used: When communicating with my physician, I feel tense. When communicating with my physician, I feel calm. When communicating with my physician, I feel jittery. When communicating with my physician, I feel nervous. When communicating with my physician, I feel relaxed. Participants were asked to complete all five-items using the following continuum: 1=not at all; 2=somewhat; 3=moderately so; 4=very much so. Obtained reliability for the FOP was .89 in this study.

Satisfaction with quality of medical care and physician. Two measures were employed to measure patient perceived quality of medical care and satisfaction with physician. The first satisfaction instrument included six-items designed to measure the patients' perceived quality of medical care (PQMC measure). The measure read as follows: "The kind of medical care that I get from my physician is:" This was followed by six bi-polar items with a seven-step response option. The items were: High quality/Low quality; Personable/Impersonal; Uncaring/Caring; Concerned/Unconcerned; Beneficial/Not beneficial; Unsatisfactory/Satisfactory. Alpha reliability for the PQMC was .94 in this study. Factor analysis indicated that all six items had high (>.70) loadings on the first unrotated factor,

which suggests the presence of a single factor.

The second satisfaction instrument was a three-item measure concerned with patient satisfaction with the primary care physician. The instructions for the satisfaction with physician measure (SWP) were as follows: "On the measure below, please circle how pleased/satisfied/comfortable you are with your physician." The items were Pleased/Displeased; Dissatisfied/Satisfied; Comfortable/Uncomfortable. A seven-step response option was provided. Alpha reliability for the SWP was .94 in this study. As with the previous measure, factor analysis indicated that all three items were highly (>.70) on the first unrotated factor. While previously unused, these measures have good face validity. It was presumed that both were measuring elements of affect toward the physician-patient transaction, and the high correlation between the scores on these two instruments ($r = .88$) suggests that presumption was likely correct. This correlation provides strong evidence of concurrent validity for the measures.

RESULTS

The mean age for the 333 participants was 33.1 with a standard deviation of 14.1. The mean for the PRCA-24 was 63.3 with a standard deviation of 18.3. The mean for the FOP was 10.2 with a standard deviation of 3.4. The mean for the PQMC was 36.1 with a standard deviation of 6.56. The mean for the SWP was 18.34 with a standard deviation of 3.53.

RQ1 asked what is the relationship between trait CA and state CA (FOP) in the health care setting? The obtained Pearson correlation indicated that the relationship between trait CA and state CA (FOP) was $r = .31$, $p < .0001$. This indicates approximately 10 percent shared variance between these variables. In a post hoc analysis it was found that the correlation between trait CA about talking in dyads was only slightly ($r = .32$) more highly correlated with fear of talking with the physician than was the general CA trait. Thus, patients who have higher trait anxiety (whether on the general trait or just on the dyadic communication trait) are likely to experience higher fear of interacting with their physician (See Table 1 for correlations obtained).

TABLE 1

Correlations Among Patient Trait CA, Fear of Physician, Satisfaction with Medical Care, and Satisfaction with Physician

	Fear of Physician	Satisfaction with Med. Care	Satisfaction with Physician
Trait CA	.31*	-.08	-.10
Fear of Physician		-.34*	-.36*
Satisfaction with Medical Care			.88*

* $p < .0001$, $n = 333$

RQ2 asked what is the relationship between trait CA and patient perceived quality of medical care (PQMC)? The obtained Pearson correlation indicated that the relationship between trait CA and satisfaction with medical care (PQMC) was $r = .08$, $p > .05$. Thus, patients who had higher trait CA did not demonstrate consistently less satisfaction with

medical care.

RQ3 asked what is the relationship between trait CA and patient satisfaction with the physician? The obtained Pearson correlation indicated that the relationship between trait CA and satisfaction with the physician (SWP) was $r = -.10$, $p > .05$. Thus, patients who had higher trait CA did not demonstrate consistently less satisfaction with the physician.

RQ4 asked what is the relationship between state CA (FOP) and patient perceived quality of medical care (PQMC)? The obtained Pearson correlation indicated that the relationship between patient fear of interacting with the physician and patient satisfaction with quality of medical care (PQMC) was $r = -.34$, $p < .0001$. This indicates these variables shared approximately 12 percent of the variance. Thus, patients who had higher state CA about interacting with their physician had lower satisfaction with the medical care they received (PQMC). Therefore, as a patient's FOP increases the satisfaction with medical care decreases.

RQ5 asked what is the relationship between state CA (FOP) and patient satisfaction with the physician? The obtained Pearson correlation indicated that patient fear of interacting with the physician and patient satisfaction with the physician (SWP) was $r = -.36$, $p < .0001$. Thus, patients who had higher state CA (FOP) had lower satisfaction with the physician. These variables shared approximately 13 percent of the variance.

DISCUSSION

The main goal of this study was to examine the relationships among trait CA, state CA with regard to talking to a physician, patient perceived satisfaction with medical care, and satisfaction with physician. Consistent with previous research examining the relationship between trait CA and various forms of state CA, it was found that there was a moderate positive relationship between trait CA and fear of talking with a physician. As a patient's trait CA increases so does fear of talking to a physician. The magnitude of the relationship was consistent with expectations based on previous research and theory.

The relationship between trait CA and patient perceived satisfaction with quality of medical care was non-significant. The relationship between trait CA and patient perceived satisfaction with physician also was non-significant. These results indicate that any effect of trait CA on a patient's satisfaction with medical care or physician is an indirect one. While trait CA may be meaningfully related with other medical concerns, such as willingness to communicate with a physician, in this study trait CA was not directly correlated with patients' satisfaction with medical care or physician.

The relationship between state CA and patient perceived satisfaction with medical care was significant and negative. The relationship between state CA and patient satisfaction with the physician also was significant and negative. These results indicate that communication apprehension about talking with a physician is associated with less satisfaction with the physician and the care given in general. This finding indicates that if physicians and/or patients do not work to overcome this patient apprehension, it may stand in the way of achieving the best care possible for the patient.

The positive implications of the results of this research are that the problem of communication apprehension in physician/patient communication may be controllable. Although trait and state CA were found to be correlated within this context, the trait was not associated with the outcome variables studied here. Rather, the outcome variables were only related to the state CA, which at least in the present study seemed to depend on the

specific situation the patient encountered much more than on the patients' general trait CA. Presuming that this finding can be replicated in future research, this indicates that physician-specific apprehension potentially can be controlled as a function of effective communication behavior on the part of the physician. Such physician communication behaviors as increased responsiveness and immediacy may serve to reduce patients' fears and increase their satisfaction with the health care provided. At least as importantly, these behaviors may facilitate more open and honest physician/patient communication which may permit the physician to provide the maximally efficacious treatment possible for the patient. Future research should directly investigate the effects of such variables as immediacy and responsiveness on patient apprehension and medical outcomes.

REFERENCES

Adler, K. (1977). Doctor-patient communication: A shift to problem-oriented research. *Human Communication Research, 3*, 179-190.

Anderson, L. A., & Zimmerman, M. A. (1993). Patient and physician perceptions of their relationship and patient satisfaction: A study of chronic disease management. *Patient Education and Counseling, 20*, 27-36.

Anderson, L. A., DeVellis, B. M., & DeVellis, R. F. (1987). Effects of modeling on patient communication, satisfaction, and knowledge. *Medical Care, 25*, 1044-1056.

Ayres, J., & Hopf, T. S. (1993). *Coping with speech anxiety*. Norwood, NJ: Ablex Publishing.

Ayres, J., Colby-Rotell, N., Wadleigh, P. M., & Hopf, T. (1996). Measuring patients' communication apprehension about interacting with physicians: Instrument development. *Communication Research Reports, 13*, 86-93.

Booth-Butterfield, S., Chory, R., & Beynon, W. (1997). Communication apprehension and health communication and behaviors. *Communication Quarterly, 45*, 235-250.

Buller, M. K., & Buller, D. B. (1987). Physicians' communication style and patient satisfaction. *Journal of Health and Social Behavior, 28*, 375-388.

Daly, J. A., & Bippus, A. M. (1998). Personality and interpersonal communication: Issues and directions. In J. C. McCroskey, J. A. Daly, M. M. Martin, & M. J. Beatty (Eds.). *Communication and personality trait perspectives*. (pp. 1-40). Cresskill, NJ: Hampton Press.

DiMatteo, M. R. (1979). A social-psychological analysis of physician-patient rapport: Toward a science of the art of medicine. *Journal of Social Issues, 35*, 12-33.

Epstein, R. M., & Beckman, H. B. (1994). Health care reform and patient-physician communication. *American Family Physician, 49*, 1718-1720.

Epstein, R. M., Campbell, T. L., Cohen-Cole, S. A., McWhinney, I. R., Smilkstein, G. (1993). Perspectives on patient-doctor communication. *The Journal of Family Practice, 37*, 377-388.

Hays, D. P., & Metzger, L. (1972). Interpersonal judgements based on talkativeness I: Fact or artifact? *Sociometry, 33*, 538-561.

Keller, V. F., & Carroll, J. G. (1994). A new model for physician-patient communication. *Patient Education and Counseling, 23*, 131-140.

Kreps, G. L. (1989). Setting the agenda for health communication research and development: Scholarship that can make a difference. *Health Communication, 1*, 11-15.

- Levinson, W. (1994). Physician-patient communication: A key to malpractice prevention. *Journal of the American Medical Association*, 272, 1619-1620.
- Levinson, W. (1995). In reply. *Journal of the American Medical Association*, 274, 23-24.
- Lewis, J. R. (1994). Patient views on quality care in general practice: Literature review. *Social Science Medicine*, 39, 655-670.
- McCroskey, J. C. (1977). Oral communication apprehension: A summary of recent theory and research. *Human Communication Research*, 4, 78-96.
- McCroskey, J. C. (1978). Validity of the PRCA as an index of oral communication apprehension. *Communication Monographs*, 45, 192-203.
- McCroskey, J. C. (1997). Willingness to communicate, communication apprehension, and self-perceived communication competence: Conceptualizations and perspectives. In J. A. Daly, J. C. McCroskey, J. Ayres, T. Hopf & Ayres, D. M. (Eds.). *Avoiding communication: Shyness, reticence, and communication apprehension*. (2nd. Ed.) (pp. 75-108). Cresskill, NJ: Hampton Press.
- McCroskey, J. C., & Beatty, M. J. (1998). Communication apprehension. In J. C. McCroskey, J. A. Daly, M. M. Martin, & M. J. Beatty (Eds.). *Communication and personality trait perspectives*. (pp. 215-232). Cresskill, NJ: Hampton Press.
- McCroskey, J. C., & Richmond, V. P. (1998). Willingness to communicate. In J. C. McCroskey, J. A. Daly, M. M. Martin, & M. J. Beatty (Eds.). *Communication and personality trait perspectives*. (pp. 119-131). Cresskill, NJ: Hampton Press.
- McCroskey, J. C., & Richmond, V. P. (1982). *The quiet ones: Communication apprehension and shyness*. 2nd. Ed. Scottsdale, AZ: Gorsuch Scarisbrick.
- Roter, D. L., Hall, J. A., & Katz, N. R. (1988). Patient-physician communication: A descriptive summary of the literature. *Patient Education and Counseling*, 12, 99-119.
- Rowland-Morin, P. A., & Carroll, J. G. (1990). Verbal communication skills and patient satisfaction. *Evaluation and the Health Professions*, 13, 168-185.
- Richmond, V. P. (1984). Implications of quietness: Some facts and speculations. In J. A. Daly & J. C. McCroskey (Eds.). *Avoiding communication: Shyness, reticence, and communication apprehension*. (pp. 145-155). Beverly Hills, CA: Sage.
- Richmond, V. P. (1997). Quietness in contemporary society: Conclusions and generalizations of the research. In J. A. Daly, J. C. McCroskey, J. Ayres, T. Hopf & Ayres, D. M. (Eds.). *Avoiding communication: Shyness, reticence, and communication apprehension*. (2nd. Ed.) (pp. 257-268). Cresskill, NJ: Hampton Press.
- Richmond, V. P., & McCroskey, J. C. (1998). *Communication apprehension, avoidance, and effectiveness*. (5th ed.). Boston: Allyn & Bacon.
- Smith, T. C., & Thompson, T. L. (1993). The inherent, powerful therapeutic value of a good physician-patient relationship. *Psychosomatics*, 34, 166-170.
- Spielberger, C. D. (1966). *Anxiety and behavior*. (Ed.) New York: Academic Press.
- Thompson, B. M. (1986). Interpersonal skills: Learning the importance of listening. *The Australian Nurses' Journal*, 16, 45-47.
- Thompson, T. L. (1984). The invisible helping hand: The role of communication in the health and social service professions. *Communication Quarterly*, 32, 148-163.
- Thompson, T. L. (1994). Interpersonal communication and health care. In M. L. Knapp & G. R. Miller (Eds.). *Handbook of interpersonal communication*. (2nd ed.) (pp. 696-725). Thousand Oaks, CA: Sage Publishers.

Wheeless, V. E., (1984). Communication apprehension and trust as predictors of willingness to discuss gynecological health topics. *Communication Research Reports*, 1, 117-121.
